

200 and 202 for the surface facing the transmission. In other words, the H-field for the lower side of upper plate 200 is vectored the same as the top side of transmission line 201, and the H field for the top side of lower plate 202 is vectored the same as the lower surface of transmission line 201. These time varying magnetic fields generate current vectors i_0 and i_2 respectively. It is important to note that the H-field polarity of the lower surface of upper plate 200 CONFLICTS with the top surface polarity of lower plate 202. Thus, regions where the upper and lower plate overlap will cause reduced coupling efficiency, due to H-field cancellation, if they are electrically connected together (i.e. Current flows in the same direction in both structures). It is therefore imperative that the multi-layered helical geometry minimize regions of overlap between differing planes having current vectors oriented in the same direction.

IN THE CLAIMS:

Cancel claims 18, 30 and 31, without prejudice or disclaimer.

Kindly amend the claims as follows:

1. (Once Amended) A device for coupling RF energy from a transmission line to a plurality of couplers comprising:

at least one transmission line for carrying energy from a radio frequency (RF) source;

a plurality of interconnecting upper plates distributed above the transmission line whose dimension extends laterally beyond the width of the transmission line;

a plurality of interconnecting lower plates distributed below the transmission line whose dimension extends laterally beyond the width of the transmission line;